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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,342	05/18/2005	Francesco Ambrico	BEAUMONT-18	3907

45722 7590 03/07/2007
PLEVY & HOWARD & DARCY P.C.
P.O. BOX 226
Fort Washington, PA 19034

EXAMINER

KNOX, STEWART

ART UNIT	PAPER NUMBER
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3641

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/535,342

Applicant(s)

AMBRICO, FRANCESCO

Examiner

Stewart T. Knox

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The Examiner acknowledges the resolution of all previous claim objections.

Claim Rejections - 35 USC § 102

1. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Karkau (5,361,524). Karkau discloses a system for projecting light elements in the air, comprising a casing (figures 1 and 2, elements 12 and 70) connected to a reservoir (containing 80) containing the light elements (80) and comprising an opening (40 through 78) extending along a determined direction, a slide (50) capable of sliding in the opening along the determined direction, a striker (fig. 3 elem. 90) arranged in the opening and fixed with respect to the opening, a spring (56) for sliding the slide in the opening, a shoulder (112) in the opening blocking the slide with respect to the casing in a stop position (col. 4 lines 33-38), a compressed gas cartridge (82) being slid along with the slide (when the slide strikes the cartridge) and, when the slide is blocked in the stop position, being projected against the striker to be opened by the striker (col. 3 lines 58-68, col. 4 lines 1-7), a channel (88) for leading the gases released on opening of the cartridge towards the reservoir. Further, it is noted that the cartridge inherently has kinetic energy that projects it into the striker, before and after the slide is blocked in the stop position.

Claim Rejections - 35 USC § 103

2. Claims 2, 3, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karkau as applied to claim 1 above, and further in view of Cocho (1,681,172). Karkau discloses

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the claimed invention including a spring comprising a helical spring with a first end connected to the casing and a second end connected to the slide wherein it is compressed in the arming position and released to slide the slide to the stop position and at least one protrusion (30) extending from the slide and for blocking the slide with respect to the casing in an arming position in which the slide is more distant from the striker than in the stop position. Karkau does not disclose the specific releasing mechanism that includes a flexible member, reinforcing piece, leg, and protrusion.

3. Cocho teaches a spring-loaded striker-based release mechanism. This mechanism comprises a slide with a body (15) and a shoulder (21), at least one flexible member or flexible tab (pivoted clip 18) for releasing the slide to slide into the opening (13) from the arming position, at least one reinforcing piece (stem portion of pivoted clip 18, roughly designated by element 20) connected to the body by a leg (leaf spring under clip 18), the shoulder (21) receiving the reinforcing piece (20) to block the slide in the arming position (figure 3), the leg being deformable to release the reinforcing piece from the shoulder. In addition, the flexible tab is manually actuated and capable of deforming the leg to release the reinforcing piece from the shoulder (page 2, column 1, lines 24-49). Cocho is analogous art because it uses a spring-loaded slide mechanism to propel a striker against a cartridge and use energy stored in the cartridge to propel objects.

4. The preceding launch structure of Cocho is provided in order to allow the system to have the appearance of a standard fountain pen with a clip, in order to carry it around conveniently. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system for projecting elements of Karkau with the spring-loaded release mechanism

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structure as taught by Cocho, since such a modification would provide the system with a release mechanism that doubles as a convenient carry and storage mechanism.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karkau and Cocho as applied to claims 1 and 5 above, and further in view of Fegley (4,454,963). Karkau in combination with Cocho teaches the claimed invention except for a mobile arm and an electromagnet. Fegley teaches a gas-dispensing device with a cartridge (figure 5) that has means for deforming a leg (41) comprising a mobile arm (36) that can be actuated electromagnetically (col. 9 lines 1-5). Fegley does not explicitly state why the electromagnetically actuated mobile arm is used, but it appears that it is used to allow remote or automatically activated control of the device, or allow for precise timing control. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the projection system of Fegley and Du with the electromagnet and mobile arm of Fegley, since such a modification would provide the projection system with means for remotely, automatically, or precisely controlling the actuation of the system.

Response to Arguments

6. Applicant's arguments filed 2/12/2007 have been fully considered but they are not persuasive.

7. Applicant argues that the device of Karkau does not stop the slide, but rather, continuously pushes the cartridge in continual contact and does not reach the stop point at element 112, noting that the figures do not appear to show dimensions to allow such a configuration. In response, the following passage is noted: "the firing bolt can progress

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forwardly to the fullest extent of the forward end 112 of the bolt slot 32, and the firing hammer 50 can make full impact with the gas cartridge 82, propelling it into the firing pin 84 and causing the discharge of the weapon” (col. 4 lines 33-38). The slide inherently imparts its kinetic energy into the gas cartridge as it propels it into the firing pin, and, as clearly stated, does so while also reaching the stop position as defined by element 112.

8. Applicant relies on a measurement of the drawings to determine that the device, when in use, will not perform the function as recited in the claims. First, it is noted that drawings in patents are not automatically presumed to be to scale, and thus relying on a measurement of the drawings in the patent is not persuasive, especially given the small distances being compared. Second, it is noted that no drawing in Karkau shows both devices screwed together, and hence, it is not known from the drawings if they are intended to be screwed entirely together in normal use. Given the above-cited passage (col. 4 lines 33-38) which states that the slide comes into contact with the shoulder during normal use, it appears that either the drawings are not to scale or the device is not intended to be fully screwed in during use. Either interpretation, plus the language in the specification, supports the 102(b) rejection above.

9. Applicant cites column 5 lines 19-25 as showing that “the slide 50 constantly pushes the cartridge 82 in its forwardmost position, even after the piercing of the cartridge 82. This means that the slide 50 follows the cartridge 82 during its entire movement” (arguments, page 6, 2nd full paragraph). However, the relied-upon section states, in part, “the gas cartridge is urged in its forwardmost position by the firing hammer” (col. 5 lines 19-21), which does not require the slide to be in contact with the cartridge throughout its entire movement. Rather, it only requires that the firing hammer impart its energy, in one form or another, to bring the cartridge and firing pin

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together. Given the above-cited passage (col. 4 lines 33-38) which states that the slide comes into contact with the shoulder during normal use, Applicant's arguments are not considered persuasive.

Allowable Subject Matter

10. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Because the art rejection did not change and it does not appear that the amendment defines a new invention over Karkau, the finality of this rejection is deemed proper. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stewart T. Knox whose telephone number is (571) 272-8235.

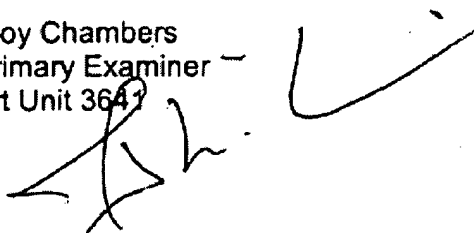
The examiner can normally be reached on Monday through Thursday, 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571) 272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stewart Knox

Troy Chambers
Primary Examiner
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03/02/2007